

Australian rare birds was noted as an inhabitant of the remarkable flora and fauna reserve at Two People Bay. The three, *Atrichornis clamosus*, *Dasyornis brachypterus* and *Psophodes nigrogularis*, are extraordinarily similar to one another as John Gilbert said long ago. All three have similar strong legs, feet and beaks; all have short wings and comparatively weak powers of flight but astonishing speed of foot. All have tails graduated in length, capable of being spread into a fan shape and capable too of being erected, wren-fashion over their backs. Again, all three are dull coloured, spend all their lives in thick vegetation, either low scrub, thickets or in the heavy cover of deep gullies, and are so wary and make such skilful use of cover that it is always a triumph to see a bird clearly and closely for more than a few seconds at a time. It is quite possible for an unwary observer to confuse Bristle-birds with Scrub-birds and it is necessary to be thoroughly familiar with the females of both species in order to identify them with certainty in the field. The Scrub-bird is the master strategist and I have never caught one unawares but the Bristle-bird, while running him very close, is also full of curiosity and one of the most confirmed "stiekybeaks" in the bush. Whiphirds, by contrast, seem to pay little attention to an observer unless he is clumsy when they glide silently away and usually do not call again for a considerable time. Incidentally, not one of these birds is truly ventriloquial, but all regulate calls with great skill.

The photograph is, I believe, the first to be published of *Psophodes nigrogularis* and was taken on August 15, 1964. It is almost certainly of a male bird.

THREE NEW WESTERN AUSTRALIAN PLANTS AND SOME NAME CHANGES

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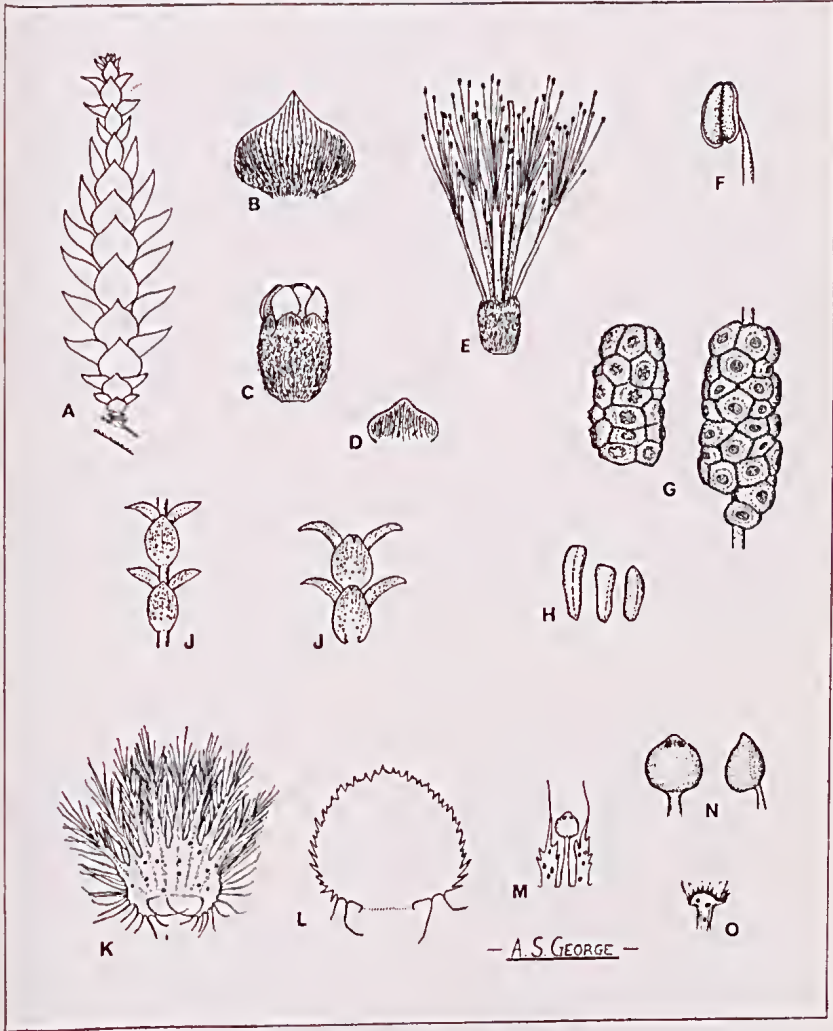
In the following contribution appear descriptions of three distinctive new additions to the flora of Western Australia—two new species and one new subspecies. *Melaleuca coccinea* is one of the "Bottlebrush" type, having large red flower spikes. It is so far known only from the Eastern Goldfields. *Verticordia patens*, from the Mogumber-Moorabool district, is a yellow-flowered species with a tall, open habit. *Banksia laevigata* subsp. *fuscolutea* occurs to the east of Hyden. It is distinguished from the typical form by the flowers, which have a bright yellow perianth limb, the remainder being clothed in a ferruginous indumentum.

Three species require new names under the International Code of Botanical Nomenclature. *Acacia aurea* and *Grevillea rufa* were later homonyms (i.e. bore the same name) of previously described species, while *Kunzea sericea* was a name based on a valid species of *Leptospermum*.

1. *Melaleuca coccinea* A. S. George, sp. nov.

Frutex ramosissimus ad 1.7 m. altus. Ramuli et folia juvenes pubescentes, mox glabri. Folia decussata sessilia, ovatacordata, obtusa vel acutiuscula, concava, 4-10 mm. longa. Flores coccineae, in spicis densis lateralibus; rachis

ante anthesem erecenta. Bracteae decussatae, cordatae, acutiuseulae, pubescentes, multinervatae, 8-11 mm. longae, deciduae. Flores sessiles. Calycis tubus 4 mm. longus, pubescens; lobi breves, late-deltoidi-ovati, obtusi, ciliati. Petala ovata, concava, glabra, decidua. Stamina phalangibus 17-23 mm. longis glabris; filamenta inaequalia; anthera rubra. Ovarium apice tomentoso, 3-loculatum, multi-ovulatum. Stylus crassus, quam staminibus brevior, stigma parva. Fructus urceolatus, compressus.



A-J, *Melaleuca coccinea*

A. Young inflorescence, showing bracts, and apex growing out, x 0.75; B. Bract, x 1.5; C. Opening flower, showing petals, x 4; D. Calyx lobe; E. Flower, x 1.75; F. Anther; G. Fruiting spikes, x 0.75; H. Seeds; J. Leaves, slight'y enlarged. Drawn from A. S. George 5918 and 5949.

K-O, *Verticordia patens*

K. Calyx lobe, x 8; L. Petal, x 8; M. Stamen and staminodia, x 8; N. Anthers; O. Base of calyx tube, showing annular scar with setae after bracteoles have fallen. Drawn from A. S. George 6431.

Holotypus: 32 miles east of Karonie, on the Trans-continental railway; in sandy loam over granite; A. S. George 5918, Sept. 22, 1963.

Paratypus: loc. id., A. S. George, 5949, Nov. 9, 1963.

A much-branched, spreading shrub to 1.7 m. tall. Young-leaves and branches pubescent, becoming glabrous. Leaves decussate, sessile, ovate-cordate, obtuse or rather acute, concave, 4-10 mm. long. Flowers bright red, in dense spikes lateral on the old stems, the rachis usually growing out before flowering. Bracts decussate, cordate, rather acute, lower part pubescent, upper part finely nerved and sparsely pubescent; each subtending 3 buds, deciduous before anthesis. Flowers sessile; calyx tube oblong, pubescent, 4 mm. long, lobes short, broadly deltoid-ovate, obtuse, striate, ciliate. Petals large, ovate, concave, glabrous, deciduous at anthesis or soon after. Stamens in 5 bundles 17-23 mm. long, glabrous; filaments unequal; anthers red. Ovary 3-celled, densely tomentose on top; ovules numerous. Style rather thick, shorter than the stamens, stigma small. Fruit urceolate, compressed, smooth; lobes persistent but finally disappearing. Seeds oblong, very finely reticulate, dark brown when mature.

The species is also known from 36 miles south of Boulder, collected by R. J. Donovan, Nov. 14, 1961, and by C. F. Davies, Nov. 1963. It is closest to *M. elliptica* Labill., differing principally in the following points: leaves sessile, decussate; floral rachis growing out before anthesis; floral bracts much larger, striate; calyx-lobes striate; petals deciduous. The flowers are a brighter red than those of *M. elliptica*.

2. *Verticordia patens* A. S. George, sp. nov.

Frutex glaber, 1 m. altus. Folia, pedicelli, bracteolae et tubus calycis cum glandulis oleosis prominentibus. Rami principales pauci, erecti, sparse foliati, ramuli floriferi ad apices corymbosis. Folia linearia, triquetro-teretia, acuta, breviter petiolata, 5-15 mm. longa. Flores flavi, 6-8 mm. diametro, in pedicellis tenuibus 8-20 mm. longis. Bracteolae orbiculares, concavae, imbricatae. lberae, in antbesem deciduae. Tubus calycis glaber, turbinatus, irregulariter 10-costatus; lobi 2.5-3 mm. longi, orbiculares, 7-9-pectinato-lobati, in basem auriculis reflexis ciliatis. Petala orbiculari-ovata, glabra, breviter dentata, ad basem cillis paucis reflexis. Stamina staminodia-que quam petalis breviora; filamenta tenuia; anthera ad apicem 2-porosa glandulis dorsalis latis apicibus brevibus obtusis. Staminodia late-linearia, acute-dentata, apicibus filiformibus. Stylus quam staminibus brevior, stigma parva. Ovuli 2:--

Holotypus: Mogumber Mission, Moore River, in sandy clay with *Eucalyptus calophylla* and *Dryandra sessilis*, A. S. George 6431, Sept. 26, 1964.

A glabrous shrub to 1 m. Leaves, pedicels, bracteoles and calyx-tube with prominent oil glands. Main stems few, erect, sparsely leaved; flowering branchlets corymbosely arranged towards apices. Leaves linear, triquetrous-terete, acute, very shortly petiolate, opposite or alternate, 5-15 mm. long. Flowers bright yellow, solitary in

the axils. Pedicels slender, 8-20 mm. long. Flowers 6-8 mm. across. Braeteoles orbicular, concave, imbricate, free, deciduous at anthesis, leaving a thick annular suture bearing a row of short, thick setae. Calyx tube glabrous, turbinate, irregularly 10-ribbed; lobes orbicular, 2.5-3 mm. long, with 7-9 pectinately fringed lobes and two reflexed deeply ciliate basal auricles. Petals orbicular-ovate, glabrous, shortly dentate, with a few reflexed cilia at the base. Stamens and staminodes shorter than the petals. Filaments slender, anthers globular, 2-porse towards the apex, connective broad, with a slightly projecting obtuse appendage. Staminodia broad-linear, acutely dentate with filiform apices. Style shorter than stamens, stigma small. Ovules 2.

Known only from the Mogumber-Moora district. Near Moora, on sandplain, Miss A. Ashby 95, Sept., 1946; 2 miles W. of Moora, associated with *Actinostrobos*, F. W. Went 136, Sept. 5, 1962; 5 miles W of Moora, in sandheath, J. S. Beard 1844, Sept. 23, 1962; W. of Gillingarra, in sand, with *Banksia* spp., *Adenanthos scricca* and occasional *Eucalyptus tottiana*, A. S. George 6409, Sept. 26, 1964.

The tall, open habit is a distinctive feature of the species, the specific epithet being derived from this point. It is closest to *V. nitens* (Lindl.) Schau., differing from that species in the more branching habit, the yellow flowers, the calyx tube less prominently ribbed with more oil glands, the prominent reflexed auricles to the calyx lobes, the anther appendages much less prominent, and the broader dentate staminodia. From *V. serrata* (Lindl.) Schau., it differs in a number of small points which together give it a different aspect. The habit is taller and more open, the leaves never ciliate; the flowers bright yellow rather than golden yellow; the calyx tube turbinate rather than compressed; the petals broader, less deeply toothed, with reflexed basal cilia; the stamens shorter with smaller anthers and less prominent appendages; and the apices of the staminodia filiform rather than obtuse. From *V. grandiflora* Endl., *V. chrysantha* Endl., *V. precissii* Schau., and *V. accrosa* Lindl., it is at once to be distinguished by the petals, as well as combinations of the characters outlined above.

3. In the Hyden-Mt. Holland area occurs a form of *Banksia laevigata* Meisn. which merits description as a new subspecies. Similar in habit to the typical form from the Ravensthorpe district, it is distinguished by the indumentum and flower colour. The typical form has pale lemon-yellow flowers, often with a greyish tinge, while the perianth is hirsute throughout. The new form has a bright yellow, glabrous perianth limb, the remainder being hirsute with a ferruginous indumentum. In both forms, the perianth becomes brown after flowering. However, when flowering specimens are dried, the typical form tends to retain its fresh colour, while the new form usually becomes ferruginous throughout. The latter also flowers one to two months later.

Banksia laevigata Meisn., subsp. *laevigata*

Type: Swan River, J. Drummond, Coll. V., n. 414. Specimens examined: Mt. Desmond, S.E. of Ravensthorpe, C. A. Gardner, Nov. 1944; Mt. Desmond, J. S. Beard 2278, Nov. 2, 1963; Ravensthorpe Range, A. S. George 1643, Oct. 14, 1960.

Banksia laevigata Meisn., subsp. *fuscolutea* A. S. George, subsp. nov.

A forma typica indumento ferrugineo, etiam limbo aureo glabro differt.

Holotypus: 17 miles E. of Hyden, A. S. George 6053, Jan. 1, 1964.

Other collections: 24 miles E. of Hyden, A. S. George 6071, Jan. 1, 1964; Hyden-Norseman road, E. of Rabbit Proof Fence, Storm, Sept. 1957 (fls. dead); Lake Cronin, C. F. Davies, early Dec., 1963 (buds).

The types of these three plants will be lodged in the Western Australian Herbarium. Isotypes will also be distributed to Kew and the National Herbarium of Victoria.

NEW SPECIFIC EPITHETS FOR THREE WESTERN
AUSTRALIAN PLANTS

Acacia flavopila A. S. George, nom. nov.

Acacia aurca C. A. Gardn. in *Journ. Roy. Soc. W. Aust.*, 27, 1942: 174, non Noronha ex Hoen et De Vr., *Tijdschr.* 11, 1844: 216.

The new epithet refers to the yellow indumentum of the peduncles, pedicels and young leaves.

Grevillea pilosa A. S. George, nom. nov.

Grevillea rufa C. A. Gardn. in *Journ. Roy. Soc. W. Aust.*, 27, 1942: 168, non (Warb.) Sleum. in *Bot. Jahrb.*, 70, 1939: 128.

The epithet refers to the conspicuous indumentum of the flowers and their pedicels.

Kunzea pulchella (Lindl.) A. S. George, comb. nov.

Salicia pulchella Lindl. in *Swan River App.*, 10, 1839.

The new combination replaces *Kunzea sericea* (Labill.) Turcz., for which the basionym was *Leptospermum sericeum* Labill. The *Leptospermum* has now been restored to its original correct status [see Gardner, *Journ. Roy. Soc. W. Aust.*, 47, 1964: 61].